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PTO/SB/01 (12-97)  
Approved for use through 9/30/00. OMB 0651-0032  
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|                                                                                       |                          |                                                                                                                         |
|---------------------------------------------------------------------------------------|--------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <b>DECLARATION FOR UTILITY OR<br/>DESIGN<br/>PATENT APPLICATION<br/>(37 CFR 1.63)</b> | Attorney Docket          | P113414                                                                                                                 |
|                                                                                       | First Named Inventor     | Dieter Blum                                                                                                             |
|                                                                                       | <i>COMPLETE IF KNOWN</i> |                                                                                                                         |
|                                                                                       | Application Number       |                                                                                                                         |
|                                                                                       | Filing Date              | December 01, 2000                                                                                                       |
|                                                                                       | Group Art Unit           |                                                                                                                         |
| <input type="checkbox"/> Declaration Submitted with Initial Filing                    | OR                       | <input checked="" type="checkbox"/> Declaration Submitted after Initial Filing (surcharge (37 C.F.R. 1.16(e)) required) |
|                                                                                       | Examiner Name            |                                                                                                                         |

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**METHOD AND APPARATUS FOR THE SPECTRALLY EFFICIENT ENCODING AND  
DECODING OF DISCRETE DATA INTO AND FROM ANALOG WAVEFORMS**

☐ the specification of which is attached hereto (Title of the Invention)

☒ OR was filed on (MM/DD/YYYY) December 01, 2000 as United States Application Number or PCT International

Application Number \_\_\_\_\_ and was amended on (MM/DD/YYYY)  (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate or of any PCT international application having a filing date before that of the application on which priority is claimed.

|  | Country | Foreign Filing Date<br>(MM/DD/YYYY) | Priority<br>Not Claimed  | Certified Copy Attached? |                          |
|--|---------|-------------------------------------|--------------------------|--------------------------|--------------------------|
|  |         |                                     | <input type="checkbox"/> | YES                      | NO                       |
|  |         |                                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|  |         |                                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|  |         |                                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below:

| Application Number(s) | Filing Date (MM/DD/YYYY) |                                                                                                                                                  |
|-----------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| 60/168,781            | 12/2/99                  | <input type="checkbox"/> Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto. |

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**Burden Hour Statement:** This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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## DECLARATION Utility or Design Patent Application

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application or PCT Parent  
Number

Parent Filing Date  
(MM/DD/YYYY)

Parent Patent Number  
(if applicable)

☐ Additional U.S. or PCT international application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

As a named inventor, I hereby appoint the following registered practitioner(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: ☒ Customer Number

22931

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Label here

☐ Registered practitioner(s) name/registration number listed below

| Name               | Registration<br>Number | Name | Registration<br>Number |
|--------------------|------------------------|------|------------------------|
| Robert B. Hughes   | 19,304                 |      |                        |
| Michael R. Schacht | 33,550                 |      |                        |
| Michael F. Hughes  | 41,084                 |      |                        |

☐ Additional registered practitioner(s) named on supplemental Registered Practitioner Information sheet PTO/SB/02C attached hereto.

Direct all correspondence to: ☒ Customer Number 22931 OR ☐ Correspondence address below

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of Sole or First Inventor: ☐ A petition has been filed for this unsigned inventor

|                                      |                        |
|--------------------------------------|------------------------|
| Given Name (first and middle if any) | Family Name or Surname |
| Dieter                               | Blum                   |

|                         |                     |       |    |         |         |             |        |
|-------------------------|---------------------|-------|----|---------|---------|-------------|--------|
| Inventor's<br>Signature |                     |       |    |         | Date    |             |        |
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☐ Additional inventors are being named on the \_\_\_\_\_ supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto